



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NATA

Client:

LumCAT: 1-1384-L

Luminaire: 92.70.410.00

Report No: 2023626-B016

Ballast type: AC

Test No: 2023626-C016

Voltage(V): 35.230

LampCAT: FORTIMO SLM C 1203

Current(A): 0.282

Lamp flux(lm): 1100.8

Power (W): 9.934

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1019.65, Efficiency(%): 92.63% , Luminous Efficacy(lm/W): 102.64

Central intensity(cd): 1619.037, Maximum intensity(cd): 1619.176

Angle of maximum intensity: C=0.0 γ =1.0

Beam Angle(50%Imax): [C0/180]Total=49.6

[C90/270]Total=49.6

Field angle(10%Imax): [C0/180]Total=68.2

[C90/270]Total=68.2

Maximum s/h(1/2): C0_180=0.79 C90_270=0.79

Maximum s/h(1/4): C0_180=0.75 C90_270=0.75

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.63%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.105%

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 1619.037 | 0.000 | 0 | 0.00% | 0.00% |
| 1.0 | 1619.176 | 1.549 | 1.549 | 0.14% | 0.15% |
| 2.0 | 1618.415 | 4.647 | 6.196 | 0.42% | 0.61% |
| 3.0 | 1613.295 | 7.729 | 13.926 | 0.70% | 1.37% |
| 4.0 | 1607.967 | 10.783 | 24.708 | 0.98% | 2.42% |
| 5.0 | 1599.525 | 13.798 | 38.507 | 1.25% | 3.78% |
| 6.0 | 1588.801 | 16.755 | 55.262 | 1.52% | 5.42% |
| 7.0 | 1575.239 | 19.639 | 74.901 | 1.78% | 7.35% |
| 8.0 | 1559.947 | 22.438 | 97.339 | 2.04% | 9.55% |
| 9.0 | 1542.373 | 25.143 | 122.482 | 2.28% | 12.01% |
| 10.0 | 1520.439 | 27.717 | 150.199 | 2.52% | 14.73% |
| 11.0 | 1495.737 | 30.138 | 180.337 | 2.74% | 17.69% |
| 12.0 | 1465.846 | 32.374 | 212.711 | 2.94% | 20.86% |
| 13.0 | 1428.759 | 34.352 | 247.063 | 3.12% | 24.23% |
| 14.0 | 1394.717 | 36.140 | 283.203 | 3.28% | 27.77% |
| 15.0 | 1355.831 | 37.761 | 320.964 | 3.43% | 31.48% |
| 16.0 | 1314.316 | 39.125 | 360.089 | 3.55% | 35.31% |
| 17.0 | 1255.205 | 40.014 | 400.103 | 3.64% | 39.24% |
| 18.0 | 1211.476 | 40.670 | 440.774 | 3.69% | 43.23% |
| 19.0 | 1150.504 | 41.094 | 481.867 | 3.73% | 47.26% |
| 20.0 | 1094.361 | 41.087 | 522.954 | 3.73% | 51.29% |
| 21.0 | 1041.955 | 41.022 | 563.976 | 3.73% | 55.31% |
| 22.0 | 989.376 | 40.820 | 604.797 | 3.71% | 59.31% |
| 23.0 | 924.426 | 40.157 | 644.953 | 3.65% | 63.25% |
| 24.0 | 860.126 | 39.017 | 683.97 | 3.54% | 67.08% |
| 25.0 | 797.258 | 37.685 | 721.655 | 3.42% | 70.77% |
| 26.0 | 726.744 | 35.974 | 757.629 | 3.27% | 74.30% |
| 27.0 | 649.658 | 33.674 | 791.303 | 3.06% | 77.61% |
| 28.0 | 571.823 | 30.925 | 822.229 | 2.81% | 80.64% |
| 29.0 | 492.661 | 27.850 | 850.079 | 2.53% | 83.37% |
| 30.0 | 412.523 | 24.440 | 874.518 | 2.22% | 85.77% |
| 31.0 | 342.480 | 21.011 | 895.529 | 1.91% | 87.83% |
| 32.0 | 286.835 | 18.029 | 913.558 | 1.64% | 89.60% |
| 33.0 | 229.081 | 15.199 | 928.757 | 1.38% | 91.09% |
| 34.0 | 168.642 | 12.036 | 940.794 | 1.09% | 92.27% |
| 35.0 | 121.688 | 9.017 | 949.81 | 0.82% | 93.15% |
| 36.0 | 88.171 | 6.682 | 956.492 | 0.61% | 93.81% |
| 37.0 | 69.026 | 5.127 | 961.619 | 0.47% | 94.31% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 55.388 | 4.153 | 965.772 | 0.38% | 94.72% |
| 39.0 | 47.141 | 3.500 | 969.271 | 0.32% | 95.06% |
| 40.0 | 40.263 | 3.048 | 972.32 | 0.28% | 95.36% |
| 41.0 | 34.838 | 2.674 | 974.994 | 0.24% | 95.62% |
| 42.0 | 30.950 | 2.390 | 977.384 | 0.22% | 95.85% |
| 43.0 | 27.345 | 2.159 | 979.544 | 0.20% | 96.07% |
| 44.0 | 24.293 | 1.949 | 981.492 | 0.18% | 96.26% |
| 45.0 | 21.795 | 1.771 | 983.264 | 0.16% | 96.43% |
| 46.0 | 19.616 | 1.620 | 984.883 | 0.15% | 96.59% |
| 47.0 | 17.879 | 1.491 | 986.375 | 0.14% | 96.74% |
| 48.0 | 16.482 | 1.389 | 987.764 | 0.13% | 96.87% |
| 49.0 | 15.312 | 1.306 | 989.069 | 0.12% | 97.00% |
| 50.0 | 14.316 | 1.235 | 990.304 | 0.11% | 97.12% |
| 51.0 | 13.458 | 1.175 | 991.48 | 0.11% | 97.24% |
| 52.0 | 12.731 | 1.124 | 992.603 | 0.10% | 97.35% |
| 53.0 | 12.102 | 1.080 | 993.684 | 0.10% | 97.45% |
| 54.0 | 11.479 | 1.039 | 994.723 | 0.09% | 97.56% |
| 55.0 | 10.988 | 1.003 | 995.726 | 0.09% | 97.65% |
| 56.0 | 10.510 | 0.971 | 996.697 | 0.09% | 97.75% |
| 57.0 | 10.095 | 0.942 | 997.639 | 0.09% | 97.84% |
| 58.0 | 9.735 | 0.917 | 998.556 | 0.08% | 97.93% |
| 59.0 | 9.396 | 0.894 | 999.451 | 0.08% | 98.02% |
| 60.0 | 9.085 | 0.873 | 1000.324 | 0.08% | 98.10% |
| 61.0 | 8.794 | 0.853 | 1001.177 | 0.08% | 98.19% |
| 62.0 | 8.538 | 0.835 | 1002.012 | 0.08% | 98.27% |
| 63.0 | 8.282 | 0.818 | 1002.83 | 0.07% | 98.35% |
| 64.0 | 8.033 | 0.801 | 1003.631 | 0.07% | 98.43% |
| 65.0 | 7.798 | 0.783 | 1004.414 | 0.07% | 98.51% |
| 66.0 | 7.590 | 0.768 | 1005.182 | 0.07% | 98.58% |
| 67.0 | 7.390 | 0.753 | 1005.935 | 0.07% | 98.65% |
| 68.0 | 7.217 | 0.740 | 1006.675 | 0.07% | 98.73% |
| 69.0 | 7.023 | 0.726 | 1007.402 | 0.07% | 98.80% |
| 70.0 | 6.836 | 0.712 | 1008.114 | 0.06% | 98.87% |
| 71.0 | 6.663 | 0.698 | 1008.811 | 0.06% | 98.94% |
| 72.0 | 6.497 | 0.684 | 1009.496 | 0.06% | 99.00% |
| 73.0 | 6.359 | 0.672 | 1010.168 | 0.06% | 99.07% |
| 74.0 | 6.158 | 0.658 | 1010.826 | 0.06% | 99.13% |
| 75.0 | 6.027 | 0.644 | 1011.47 | 0.06% | 99.20% |

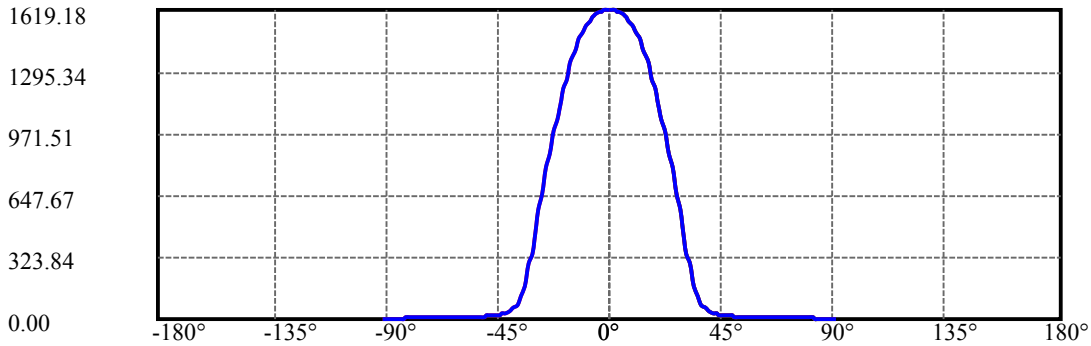
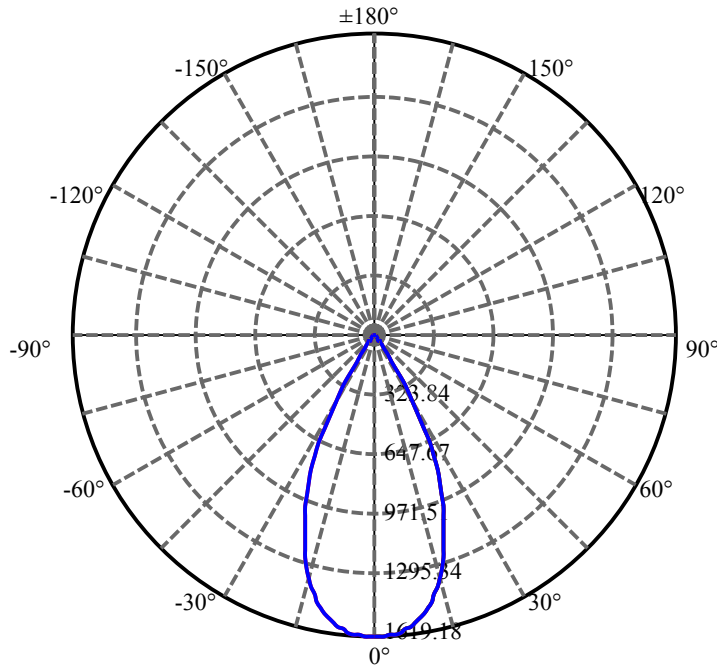
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 5.867 | 0.631 | 1012.101 | 0.06% | 99.26% |
| 77.0 | 5.708 | 0.617 | 1012.718 | 0.06% | 99.32% |
| 78.0 | 5.563 | 0.603 | 1013.322 | 0.05% | 99.38% |
| 79.0 | 5.418 | 0.590 | 1013.912 | 0.05% | 99.44% |
| 80.0 | 5.286 | 0.577 | 1014.489 | 0.05% | 99.49% |
| 81.0 | 5.162 | 0.565 | 1015.054 | 0.05% | 99.55% |
| 82.0 | 5.016 | 0.552 | 1015.606 | 0.05% | 99.60% |
| 83.0 | 4.885 | 0.538 | 1016.144 | 0.05% | 99.66% |
| 84.0 | 4.781 | 0.527 | 1016.671 | 0.05% | 99.71% |
| 85.0 | 4.677 | 0.516 | 1017.187 | 0.05% | 99.76% |
| 86.0 | 4.601 | 0.507 | 1017.694 | 0.05% | 99.81% |
| 87.0 | 4.525 | 0.499 | 1018.193 | 0.05% | 99.86% |
| 88.0 | 4.449 | 0.492 | 1018.685 | 0.04% | 99.91% |
| 89.0 | 4.394 | 0.485 | 1019.17 | 0.04% | 99.95% |
| 90.0 | 4.373 | 0.481 | 1019.65 | 0.04% | 100.00% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 874.52 | 79.44% | 85.77% |
| 0-40 | 972.32 | 88.33% | 95.36% |
| 0-60 | 1000.32 | 90.87% | 98.10% |
| 0-90 | 1019.17 | 92.59% | 99.95% |
| 0-120 | 1019.17 | 92.59% | 99.95% |
| 0-180 | 1019.65 | 92.63% | 100.00% |
| 60-90 | 18.85 | 1.71% | 1.85% |
| 90-120 | 0.00 | 0.00% | 0.00% |
| 90-130 | 0.00 | 0.00% | 0.00% |
| 90-150 | 0.00 | 0.00% | 0.00% |
| 90-180 | 0.00 | 0.00% | 0.00% |
| 0-27.79 | 815.72 | 74.10% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 150.20 |
| 10-20 | 372.76 |
| 20-30 | 351.56 |
| 30-40 | 97.80 |
| 40-50 | 17.98 |
| 50-60 | 10.02 |
| 60-70 | 7.79 |
| 70-80 | 6.38 |
| 80-90 | 4.68 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |



C0(Max): —————

C0/C180: —————

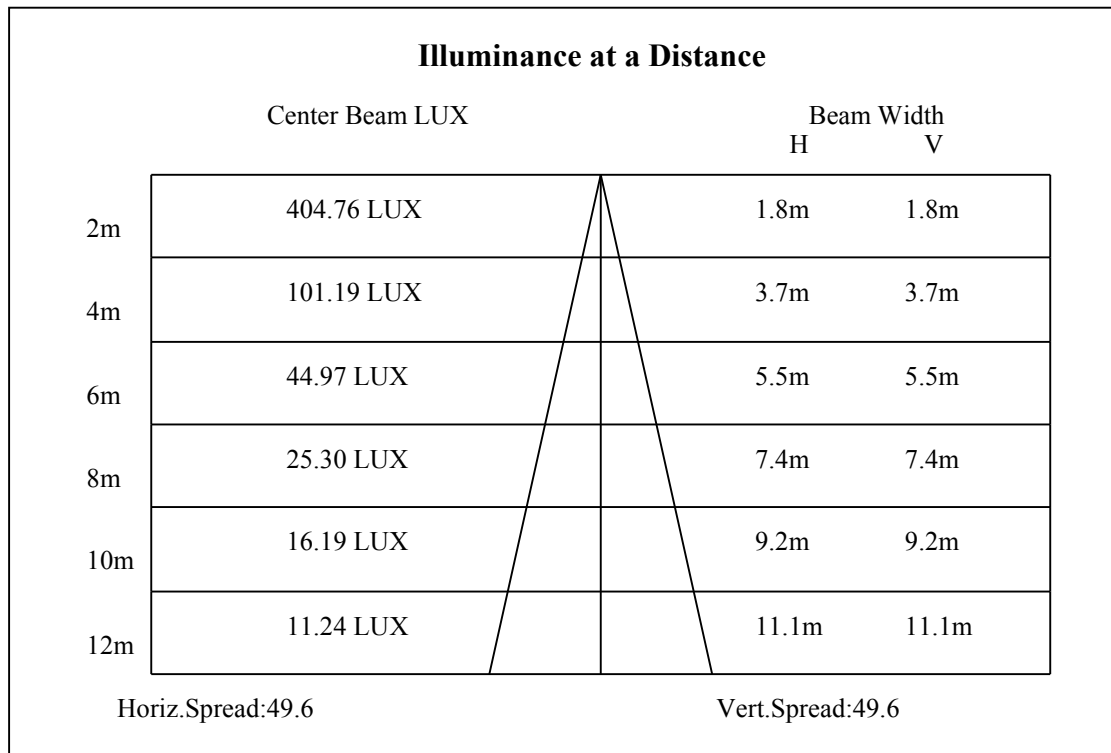
C90/C270: —————

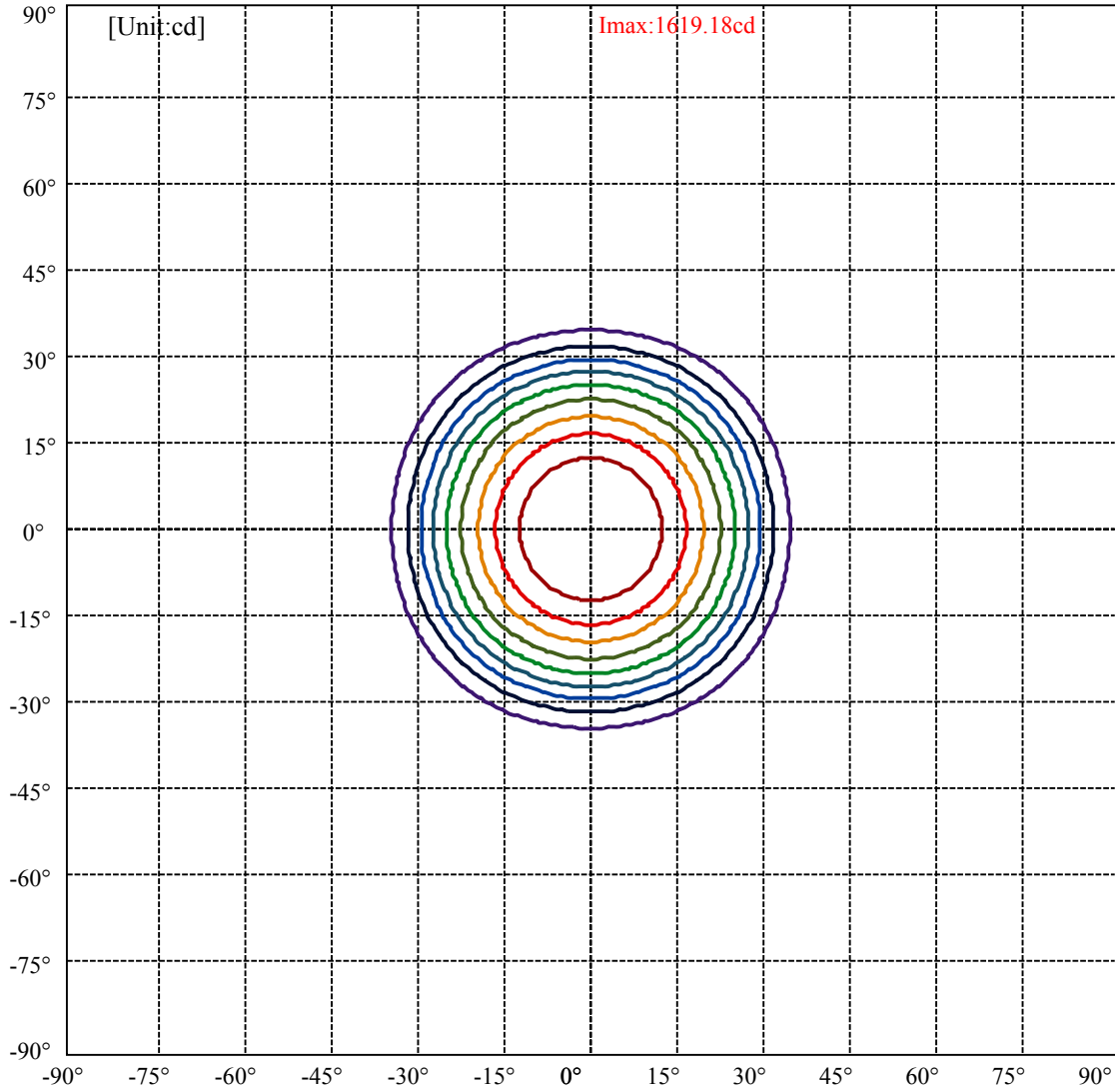
Field angle(10%Imax):C0/180Left:34.1 Right:34.1

:C90/270Left:34.1 Right:34.1

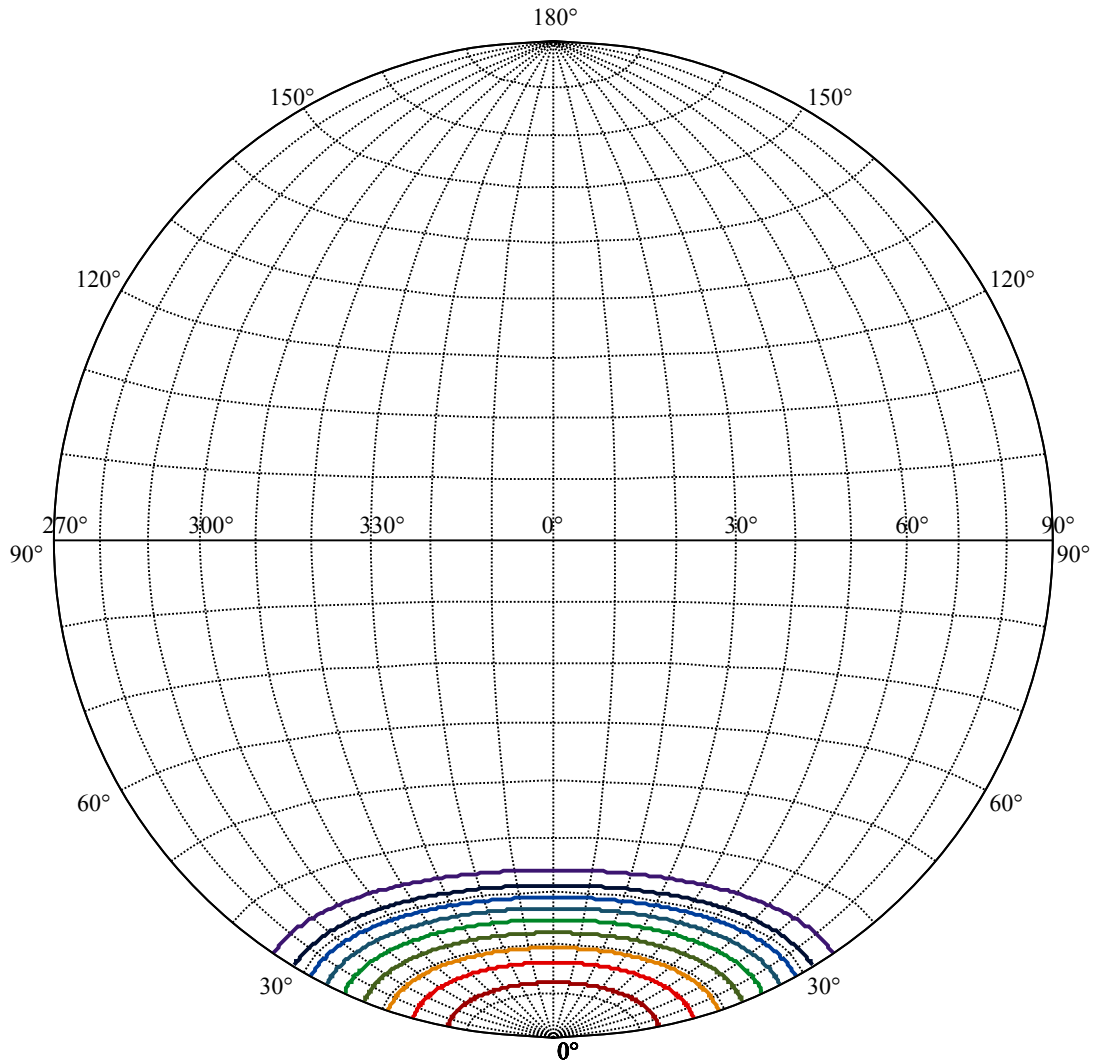
Beam Angle(50%Imax):C0/180Left:24.8 Right:24.8

:C90/270Left:24.8 Right:24.8





| | |
|-------------------|---|
| (10%Imax) 161.918 | — |
| (20%Imax) 323.835 | — |
| (30%Imax) 485.753 | — |
| (40%Imax) 647.67 | — |
| (50%Imax) 809.588 | — |
| (60%Imax) 971.505 | — |
| (70%Imax) 1133.42 | — |
| (80%Imax) 1295.34 | — |
| (90%Imax) 1457.26 | — |



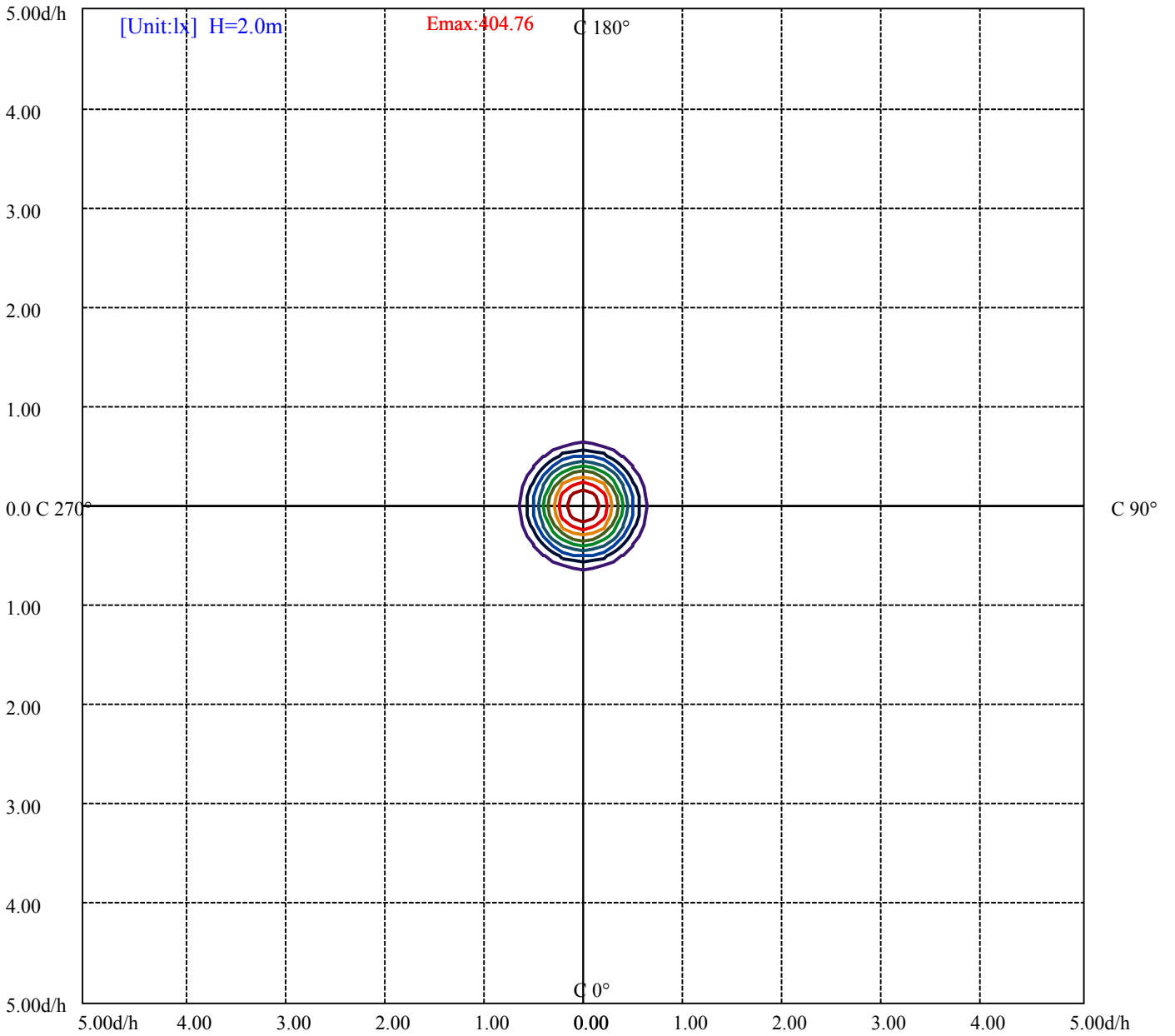
House

[Unit:cd]

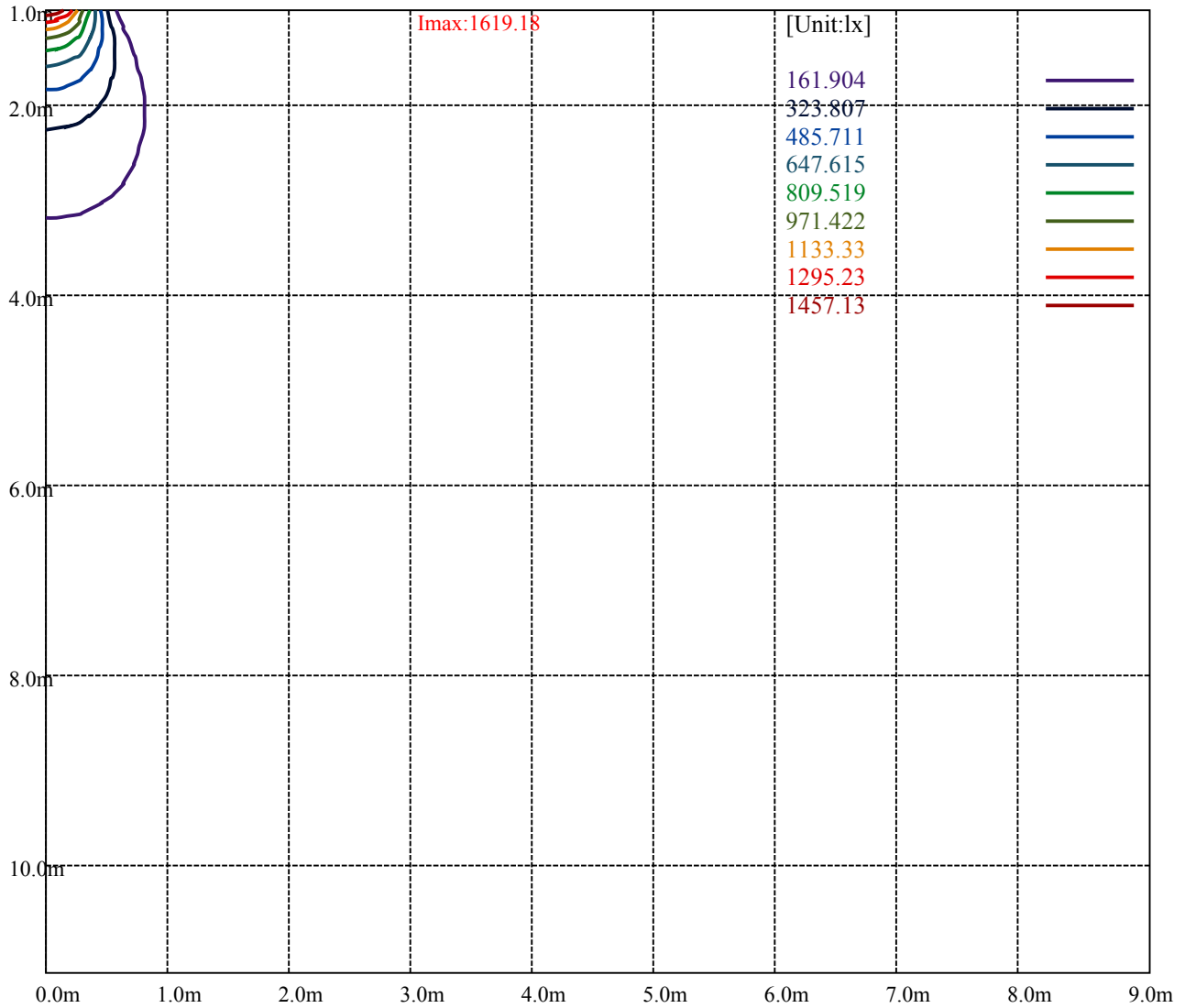
Road

Imax:1619.18

| | | |
|-----------|---------|---|
| (10%Imax) | 161.918 | — |
| (20%Imax) | 323.835 | — |
| (30%Imax) | 485.753 | — |
| (40%Imax) | 647.67 | — |
| (50%Imax) | 809.588 | — |
| (60%Imax) | 971.505 | — |
| (70%Imax) | 1133.42 | — |
| (80%Imax) | 1295.34 | — |
| (90%Imax) | 1457.26 | — |



| | |
|--------------------|---|
| (10%Emax) 40.476 | — |
| (20%Emax) 80.95175 | — |
| (30%Emax) 121.4277 | — |
| (40%Emax) 161.9037 | — |
| (50%Emax) 202.3797 | — |
| (60%Emax) 242.8555 | — |
| (70%Emax) 283.3325 | — |
| (80%Emax) 323.8075 | — |
| (90%Emax) 364.2825 | — |



Luminance Table

| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|----|----|----|----|----|----|----|----|----|
| C0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Glare Table

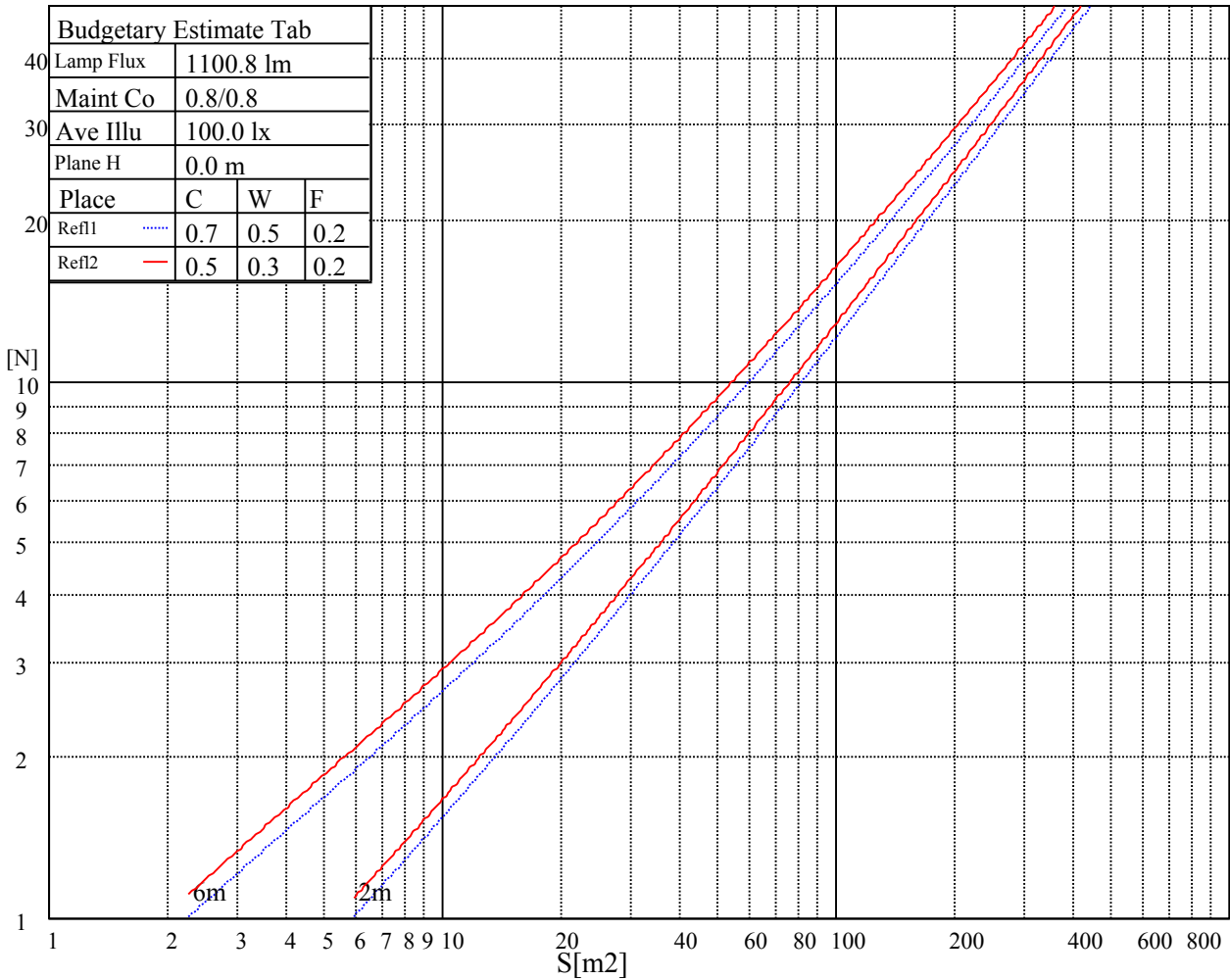
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 500 | <=300 | | |
| 2.2 | D | | | | 2000 | 1000 | 500 | <=300 | |
| 2.55 | E | | | | | 2000 | 1000 | 500 | <=300 |
| | | a | b | c | d | e | f | g | h |

Luminance Limiting Curve

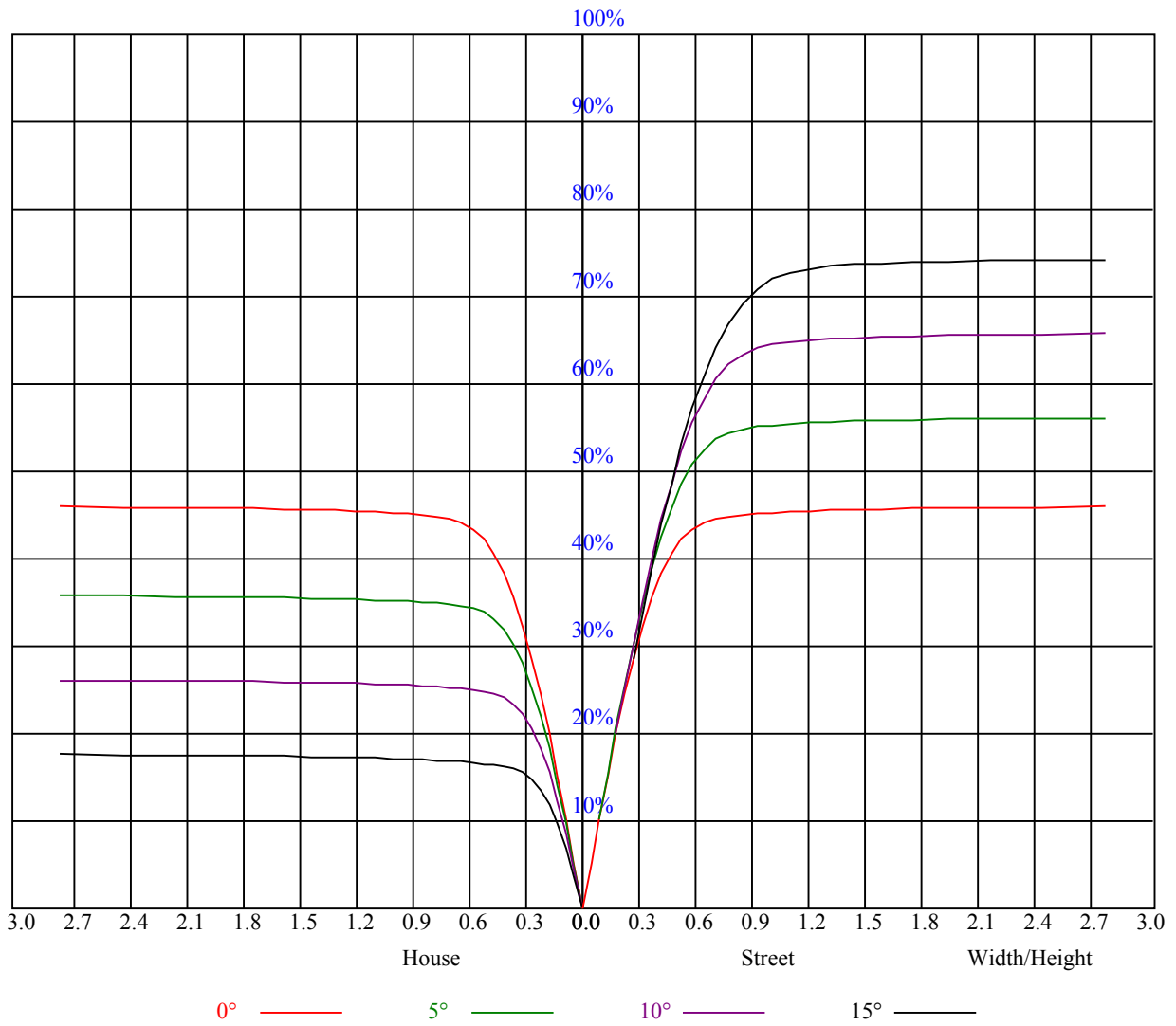


| Illumination assessment according UGR | | | | | | | | | | | |
|---|-----|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|-----|
| Rf of Ceiling | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 | |
| Rf of Wall | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 | |
| Rf of Floor | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X | Y | | | | | | | | | | |
| 2H | 2H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 3H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| 4H | 12H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 2H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 3H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| 8H | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 12H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| 12H | 12H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | |
| Variation with the observer position at spacings: | | | | | | | | | | | |
| S = 1.0H | | 非数字/非数字 | | | | | 非数字/非数字 | | | | |
| S = 1.5H | | 非数字/非数字 | | | | | 非数字/非数字 | | | | |
| S = 2.0H | | 非数字/非数字 | | | | | 非数字/非数字 | | | | |
| Standard tables: | | BK0 | | | | | BK0 | | | | |
| Uncorrected UGR | | 负无穷大 | | | | | 负无穷大 | | | | |

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



| RHOCC | 80 | | | 70 | | | 50 | | | 30 | | | 10 | | | 0 |
|-------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| RHOW | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | COEFFICIENTS OF UTILIZATION RHOFC=20 CU | | | | | | | | | | | | | | | |
| 0 | 1.10 | 1.10 | 1.10 | 1.08 | 1.08 | 1.08 | 1.03 | 1.03 | 1.03 | 0.99 | 0.99 | 0.99 | 0.95 | 0.95 | 0.95 | 0.93 |
| 1 | 1.03 | 1.01 | 0.99 | 1.01 | 0.99 | 0.97 | 0.97 | 0.96 | 0.94 | 0.94 | 0.92 | 0.91 | 0.91 | 0.90 | 0.89 | 0.87 |
| 2 | 0.96 | 0.93 | 0.90 | 0.95 | 0.92 | 0.89 | 0.92 | 0.89 | 0.87 | 0.89 | 0.87 | 0.85 | 0.87 | 0.85 | 0.83 | 0.82 |
| 3 | 0.91 | 0.86 | 0.83 | 0.89 | 0.86 | 0.82 | 0.87 | 0.84 | 0.81 | 0.85 | 0.82 | 0.80 | 0.83 | 0.81 | 0.79 | 0.77 |
| 4 | 0.86 | 0.81 | 0.77 | 0.85 | 0.80 | 0.77 | 0.83 | 0.79 | 0.76 | 0.81 | 0.78 | 0.75 | 0.79 | 0.77 | 0.74 | 0.73 |
| 5 | 0.81 | 0.76 | 0.73 | 0.80 | 0.76 | 0.72 | 0.79 | 0.75 | 0.72 | 0.77 | 0.74 | 0.71 | 0.76 | 0.73 | 0.70 | 0.69 |
| 6 | 0.77 | 0.72 | 0.68 | 0.76 | 0.71 | 0.68 | 0.75 | 0.71 | 0.68 | 0.74 | 0.70 | 0.67 | 0.72 | 0.69 | 0.67 | 0.65 |
| 7 | 0.73 | 0.68 | 0.65 | 0.72 | 0.68 | 0.64 | 0.71 | 0.67 | 0.64 | 0.70 | 0.67 | 0.64 | 0.69 | 0.66 | 0.63 | 0.62 |
| 8 | 0.70 | 0.65 | 0.61 | 0.69 | 0.64 | 0.61 | 0.68 | 0.64 | 0.61 | 0.67 | 0.63 | 0.61 | 0.66 | 0.63 | 0.60 | 0.59 |
| 9 | 0.66 | 0.61 | 0.58 | 0.66 | 0.61 | 0.58 | 0.65 | 0.61 | 0.58 | 0.64 | 0.60 | 0.58 | 0.64 | 0.60 | 0.57 | 0.56 |
| 10 | 0.63 | 0.59 | 0.55 | 0.63 | 0.58 | 0.55 | 0.62 | 0.58 | 0.55 | 0.62 | 0.58 | 0.55 | 0.61 | 0.57 | 0.55 | 0.54 |



Intensity data(cd)

| | | | | | | | | | |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| C/γ(°) | 0.0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 |
| 0.0 | 1624.57 | 1623.47 | 1624.02 | 1620.70 | 1616.82 | 1607.41 | 1597.45 | 1585.83 | 1569.22 |
| 45.0 | 1617.93 | 1622.36 | 1620.14 | 1617.38 | 1615.72 | 1610.73 | 1604.65 | 1591.91 | 1576.97 |
| 90.0 | 1619.04 | 1616.27 | 1611.84 | 1601.88 | 1591.36 | 1578.63 | 1562.02 | 1538.22 | 1520.51 |
| 135.0 | 1614.61 | 1617.93 | 1614.61 | 1607.97 | 1597.45 | 1583.61 | 1566.45 | 1551.51 | 1527.70 |
| 180.0 | 1624.57 | 1624.57 | 1626.23 | 1617.93 | 1614.61 | 1604.09 | 1594.13 | 1576.97 | 1561.47 |
| 225.0 | 1617.93 | 1617.38 | 1616.27 | 1612.40 | 1605.20 | 1597.45 | 1586.38 | 1573.09 | 1557.59 |
| 270.0 | 1619.04 | 1615.16 | 1617.38 | 1616.82 | 1613.50 | 1610.18 | 1604.65 | 1593.57 | 1584.16 |
| 315.0 | 1614.61 | 1616.27 | 1616.82 | 1611.29 | 1609.07 | 1604.09 | 1594.68 | 1590.81 | 1581.95 |
| 360.0 | 1624.57 | 1623.47 | 1624.02 | 1620.70 | 1616.82 | 1607.41 | 1597.45 | 1585.83 | 1569.22 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 1553.72 | 1533.79 | 1502.24 | 1470.14 | 1426.41 | 1390.98 | 1350.57 | 1312.93 | 1262.01 |
| 45.0 | 1559.81 | 1539.33 | 1513.87 | 1489.51 | 1459.07 | 1426.41 | 1382.12 | 1345.04 | 1291.90 |
| 90.0 | 1503.35 | 1469.58 | 1440.80 | 1405.93 | 1360.54 | 1324.00 | 1279.72 | 1234.33 | 1093.57 |
| 135.0 | 1506.67 | 1487.30 | 1457.40 | 1416.44 | 1378.80 | 1341.72 | 1299.09 | 1244.29 | 1195.03 |
| 180.0 | 1538.22 | 1514.97 | 1491.72 | 1458.51 | 1415.34 | 1381.02 | 1344.48 | 1307.40 | 1252.60 |
| 225.0 | 1538.77 | 1519.40 | 1495.60 | 1470.14 | 1433.05 | 1395.41 | 1359.98 | 1307.40 | 1264.77 |
| 270.0 | 1573.65 | 1553.72 | 1538.22 | 1520.51 | 1490.06 | 1461.28 | 1434.71 | 1403.16 | 1356.11 |
| 315.0 | 1564.79 | 1545.42 | 1526.04 | 1495.60 | 1466.82 | 1436.92 | 1395.96 | 1359.98 | 1325.66 |
| 360.0 | 1553.72 | 1533.79 | 1502.24 | 1470.14 | 1426.41 | 1390.98 | 1350.57 | 1312.93 | 1262.01 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 1216.62 | 1102.70 | 1102.70 | 1047.79 | 992.66 | 933.10 | 875.36 | 805.56 | 743.90 |
| 45.0 | 1246.51 | 1198.90 | 1134.69 | 1078.23 | 1026.20 | 968.08 | 893.91 | 836.34 | 774.90 |
| 90.0 | 1093.57 | 1066.05 | 1011.70 | 942.40 | 885.66 | 813.75 | 750.48 | 681.51 | 607.45 |
| 135.0 | 1141.34 | 1076.02 | 1023.99 | 968.08 | 896.67 | 838.00 | 760.50 | 691.86 | 617.69 |
| 180.0 | 1206.65 | 1155.17 | 1084.32 | 1029.52 | 970.85 | 898.89 | 842.43 | 785.41 | 706.26 |
| 225.0 | 1181.19 | 1097.22 | 1083.44 | 1024.76 | 967.08 | 893.46 | 832.68 | 771.19 | 703.27 |
| 270.0 | 1316.81 | 1272.52 | 1221.60 | 1152.41 | 1095.95 | 1037.82 | 969.19 | 906.08 | 833.02 |
| 315.0 | 1289.13 | 1235.44 | 1092.46 | 1092.46 | 1079.95 | 1012.31 | 956.45 | 900.10 | 827.48 |
| 360.0 | 1216.62 | 1102.70 | 1102.70 | 1047.79 | 992.66 | 933.10 | 875.36 | 805.56 | 743.90 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 659.93 | 589.13 | 514.23 | 420.36 | 350.00 | 285.29 | 225.68 | 160.86 | 121.28 |
| 45.0 | 705.70 | 613.26 | 538.54 | 464.36 | 376.35 | 309.37 | 293.87 | 220.75 | 130.91 |
| 90.0 | 510.64 | 436.30 | 364.61 | 282.97 | 224.74 | 173.81 | 129.75 | 88.68 | 69.63 |
| 135.0 | 540.20 | 446.65 | 377.46 | 311.59 | 281.69 | 281.69 | 137.55 | 103.84 | 80.43 |
| 180.0 | 633.19 | 560.68 | 485.95 | 390.19 | 317.67 | 286.12 | 286.12 | 133.01 | 100.13 |
| 225.0 | 610.44 | 530.40 | 452.85 | 378.90 | 291.16 | 228.33 | 161.91 | 119.62 | 87.79 |
| 270.0 | 770.47 | 701.83 | 606.62 | 528.57 | 452.18 | 375.80 | 309.37 | 292.77 | 217.15 |
| 315.0 | 766.70 | 696.35 | 601.03 | 523.26 | 446.04 | 354.26 | 288.39 | 229.61 | 166.17 |
| 360.0 | 659.93 | 589.13 | 514.23 | 420.36 | 350.00 | 285.29 | 225.68 | 160.86 | 121.28 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 92.11 | 72.62 | 57.68 | 49.43 | 42.90 | 36.48 | 32.27 | 28.78 | 25.19 |
| 45.0 | 96.65 | 70.58 | 58.51 | 49.71 | 41.07 | 35.81 | 31.66 | 28.29 | 25.41 |
| 90.0 | 58.34 | 50.04 | 41.79 | 36.64 | 32.38 | 28.06 | 25.13 | 22.03 | 19.93 |
| 135.0 | 62.49 | 53.36 | 46.05 | 39.30 | 34.93 | 30.22 | 27.12 | 24.41 | 22.14 |
| 180.0 | 76.33 | 62.05 | 51.15 | 44.34 | 37.92 | 33.54 | 29.89 | 25.96 | 23.41 |
| 225.0 | 63.66 | 53.42 | 45.94 | 39.97 | 34.26 | 30.44 | 27.12 | 24.24 | 21.15 |
| 270.0 | 131.30 | 96.48 | 68.42 | 56.79 | 48.66 | 40.74 | 36.04 | 31.94 | 27.57 |
| 315.0 | 124.49 | 93.66 | 73.56 | 60.94 | 49.98 | 43.40 | 38.36 | 33.10 | 29.56 |
| 360.0 | 92.11 | 72.62 | 57.68 | 49.43 | 42.90 | 36.48 | 32.27 | 28.78 | 25.19 |

Intensity data(cd)

| | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C/γ(°) | 45.0 | 46.0 | 47.0 | 48.0 | 49.0 | 50.0 | 51.0 | 52.0 | 53.0 |
| 0.0 | 22.75 | 20.20 | 18.49 | 17.05 | 15.94 | 14.78 | 13.95 | 13.23 | 12.57 |
| 45.0 | 22.31 | 20.20 | 18.38 | 16.83 | 15.33 | 14.39 | 13.40 | 12.73 | 12.12 |
| 90.0 | 18.10 | 16.61 | 15.22 | 14.28 | 13.45 | 12.73 | 11.96 | 11.40 | 10.96 |
| 135.0 | 19.71 | 18.10 | 16.83 | 15.72 | 14.56 | 13.73 | 12.95 | 12.34 | 11.68 |
| 180.0 | 21.15 | 19.32 | 17.44 | 16.27 | 15.28 | 14.39 | 13.40 | 12.73 | 12.12 |
| 225.0 | 19.10 | 17.38 | 15.78 | 14.72 | 13.89 | 12.95 | 12.34 | 11.62 | 11.13 |
| 270.0 | 24.69 | 21.64 | 19.60 | 17.88 | 16.44 | 15.06 | 14.17 | 13.40 | 12.68 |
| 315.0 | 26.57 | 23.47 | 21.31 | 19.10 | 17.60 | 16.50 | 15.50 | 14.39 | 13.56 |
| 360.0 | 22.75 | 20.20 | 18.49 | 17.05 | 15.94 | 14.78 | 13.95 | 13.23 | 12.57 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 11.85 | 11.35 | 10.90 | 10.46 | 9.96 | 9.69 | 9.30 | 8.97 | 8.75 |
| 45.0 | 11.46 | 10.96 | 10.52 | 10.02 | 9.74 | 9.35 | 9.08 | 8.75 | 8.52 |
| 90.0 | 10.46 | 10.02 | 9.63 | 9.24 | 8.97 | 8.69 | 8.36 | 8.14 | 7.97 |
| 135.0 | 11.18 | 10.57 | 10.19 | 9.80 | 9.41 | 9.08 | 8.80 | 8.52 | 8.19 |
| 180.0 | 11.46 | 11.02 | 10.46 | 10.07 | 9.74 | 9.41 | 9.13 | 8.80 | 8.58 |
| 225.0 | 10.68 | 10.30 | 9.85 | 9.58 | 9.30 | 9.02 | 8.75 | 8.52 | 8.30 |
| 270.0 | 11.85 | 11.35 | 10.90 | 10.46 | 10.02 | 9.69 | 9.35 | 9.08 | 8.80 |
| 315.0 | 12.90 | 12.34 | 11.62 | 11.13 | 10.74 | 10.24 | 9.91 | 9.58 | 9.19 |
| 360.0 | 11.85 | 11.35 | 10.90 | 10.46 | 9.96 | 9.69 | 9.30 | 8.97 | 8.75 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 8.47 | 8.19 | 8.03 | 7.75 | 7.53 | 7.36 | 7.20 | 6.97 | 6.75 |
| 45.0 | 8.30 | 8.08 | 7.80 | 7.58 | 7.42 | 7.25 | 7.09 | 6.86 | 6.70 |
| 90.0 | 7.69 | 7.53 | 7.31 | 7.14 | 6.97 | 6.81 | 6.64 | 6.48 | 6.31 |
| 135.0 | 7.97 | 7.75 | 7.53 | 7.31 | 7.14 | 6.97 | 6.75 | 6.59 | 6.42 |
| 180.0 | 8.30 | 7.97 | 7.80 | 7.58 | 7.36 | 7.20 | 7.03 | 6.81 | 6.64 |
| 225.0 | 8.08 | 7.80 | 7.58 | 7.42 | 7.25 | 7.09 | 6.86 | 6.70 | 6.59 |
| 270.0 | 8.52 | 8.30 | 8.03 | 7.86 | 7.58 | 7.42 | 7.25 | 7.09 | 6.86 |
| 315.0 | 8.91 | 8.64 | 8.30 | 8.08 | 7.86 | 7.64 | 7.36 | 7.20 | 7.03 |
| 360.0 | 8.47 | 8.19 | 8.03 | 7.75 | 7.53 | 7.36 | 7.20 | 6.97 | 6.75 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 6.59 | 6.48 | 6.25 | 6.14 | 5.98 | 5.81 | 5.65 | 5.48 | 5.37 |
| 45.0 | 6.53 | 6.42 | 6.20 | 6.09 | 5.92 | 5.76 | 5.65 | 5.54 | 5.37 |
| 90.0 | 6.20 | 6.09 | 5.87 | 5.70 | 5.59 | 5.42 | 5.31 | 5.15 | 4.98 |
| 135.0 | 6.25 | 6.09 | 5.92 | 5.76 | 5.65 | 5.48 | 5.31 | 5.20 | 5.09 |
| 180.0 | 6.48 | 6.31 | 6.14 | 6.03 | 5.87 | 5.70 | 5.54 | 5.42 | 5.31 |
| 225.0 | 6.42 | 6.25 | 6.09 | 5.92 | 5.81 | 5.65 | 5.54 | 5.37 | 5.20 |
| 270.0 | 6.70 | 6.59 | 6.37 | 6.25 | 6.03 | 5.92 | 5.76 | 5.59 | 5.48 |
| 315.0 | 6.81 | 6.64 | 6.42 | 6.31 | 6.09 | 5.92 | 5.76 | 5.59 | 5.48 |
| 360.0 | 6.59 | 6.48 | 6.25 | 6.14 | 5.98 | 5.81 | 5.65 | 5.48 | 5.37 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 5.26 | 5.09 | 4.98 | 4.87 | 4.76 | 4.65 | 4.54 | 4.54 | 4.48 |
| 45.0 | 5.20 | 5.09 | 4.93 | 4.82 | 4.71 | 4.65 | 4.54 | 4.48 | 4.48 |
| 90.0 | 4.93 | 4.82 | 4.71 | 4.65 | 4.54 | 4.48 | 4.48 | 4.32 | 4.32 |
| 135.0 | 4.93 | 4.82 | 4.71 | 4.59 | 4.54 | 4.48 | 4.43 | 4.26 | 4.32 |
| 180.0 | 5.15 | 4.98 | 4.87 | 4.76 | 4.65 | 4.59 | 4.48 | 4.48 | 4.32 |
| 225.0 | 5.15 | 4.98 | 4.82 | 4.76 | 4.65 | 4.59 | 4.54 | 4.48 | 4.32 |
| 270.0 | 5.37 | 5.20 | 5.04 | 4.93 | 4.82 | 4.71 | 4.59 | 4.54 | 4.48 |
| 315.0 | 5.31 | 5.15 | 5.04 | 4.87 | 4.76 | 4.65 | 4.59 | 4.48 | 4.43 |
| 360.0 | 5.26 | 5.09 | 4.98 | 4.87 | 4.76 | 4.65 | 4.54 | 4.54 | 4.48 |

Intensity data(cd)

| | |
|--------|------|
| C/γ(°) | 90.0 |
| 0.0 | 4.37 |
| 45.0 | 4.32 |
| 90.0 | 4.37 |
| 135.0 | 4.32 |
| 180.0 | 4.37 |
| 225.0 | 4.37 |
| 270.0 | 4.37 |
| 315.0 | 4.48 |
| 360.0 | 4.37 |